

## sequence listing.ST25 SEQUENCE LISTING

| <110>                            | Wei, Gua<br>Guo, Ror<br>Zhang, F | ıgbing                                | g                |                  |                  |                   |                  |                  |                  |                  |                   |                  |                  |       |
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| <140><br><141>                   |                                  | 10/650,365<br>2003-08-28              |                  |                  |                  |                   |                  |                  |                  |                  |                   |                  |                  |       |
| <150><br><151>                   |                                  | PCT/CN02/00128<br>2002-02-28          |                  |                  |                  |                   |                  |                  |                  |                  |                   |                  |                  |       |
| <150><br><151>                   |                                  | CN 01104367.9<br>2001-02-28           |                  |                  |                  |                   |                  |                  |                  |                  |                   |                  |                  |       |
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| <170>                            | PatentIr                         | ver                                   | sion             | 3.2              |                  |                   |                  |                  |                  |                  |                   |                  |                  |       |
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| Met Cy:                          | c gac ct <u>c</u><br>s Asp Lei   | Pro<br>5                              | cag<br>Gln       | acc<br>Thr       | cac<br>His       | ser               | Leu<br>10        | ggt<br>Gly       | aac<br>Asn       | cgt<br>Arg       | cgt<br>Arg        | gct<br>Ala<br>15 | ctg<br>Leu       | 48    |
| atc cte<br>Ile Le                | g ctg gct<br>J Leu Ala<br>20     | cag<br>Gln                            | atg<br>Met       | cgt<br>Arg       | cgt<br>Arg       | atc<br>Ile<br>25  | tcc<br>Ser       | ccg<br>Pro       | ttc<br>Phe       | tcc<br>Ser       | tgc<br>Cys<br>30  | ctg<br>Leu       | aaa<br>Lys       | 96    |
| gac cg<br>Asp Ar                 | t cac gac<br>g His Asp<br>35     | ttc<br>Phe                            | ggt<br>Gly       | ttc<br>Phe       | ccg<br>Pro<br>40 | cag<br>Gln        | gaa<br>Glu       | gaa<br>Glu       | ttc<br>Phe       | gac<br>Asp<br>45 | ggt<br>Gly        | aac<br>Asn       | cag<br>Gln       | 144   |
| ttc caq<br>Phe Gli<br>50         | g aaa gct<br>1 Lys Ala           | cag<br>Gln                            | gct<br>Ala       | atc<br>Ile<br>55 | tcc<br>Ser       | gtt<br>Val        | ctg<br>Leu       | cac<br>His       | gaa<br>Glu<br>60 | atg<br>Met       | atc<br>Ile        | cag<br>Gln       | cag<br>Gln       | 192   |
| acc tte<br>Thr Phe<br>65         | aac ctg<br>Asn Leu               | ttc<br>Phe                            | tcc<br>ser<br>70 | acc<br>Thr       | aaa<br>Lys       | gac<br>Asp        | tcc<br>Ser       | tcc<br>Ser<br>75 | gct<br>Ala       | gct<br>Ala       | tgg<br>Trp        | gac<br>Asp       | gaa<br>Glu<br>80 | 240   |
| tcc ctg<br>Ser Lei               | g ctg gaa<br>u Leu Glu           | aaa<br>Lys<br>85                      | ttc<br>Phe       | tac<br>Tyr       | acc<br>Thr       | gaa<br>Glu        | ctg<br>Leu<br>90 | tac<br>Tyr       | cag<br>Gln       | cag<br>Gln       | ctg<br>Leu        | aac<br>Asn<br>95 | gac<br>Asp       | 288   |
| ctg gaa<br>Leu Gli               | a gct tgc<br>u Ala Cys<br>100    | Val                                   | atc<br>Ile       | cag<br>Gln       | gaa<br>Glu       | gtt<br>Val<br>105 | ggt<br>Gly       | gtt<br>Val       | gaa<br>Glu       | gaa<br>Glu       | acc<br>Thr<br>110 | ccg<br>Pro       | ctg<br>Leu       | 336   |
| atg aad                          | gtt gac                          | tcc                                   | atc              | ctg              | gct              | gtt               |                  | aaa<br>Page      |                  | ttc              | cag               | cgt              | atc              | ` 384 |

sequence listing.ST25
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115 120 125 acc ctg tac ctg acc gaa aaa aaa tac tcc ccg tgc gct tgg gaa gtt Thr Leu Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val 130 135 140 gtt cgt gct gaa atc atg cgt tcc ttc tcc ctg tcc acc aac ctg cag Val Arg Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln 145 150 155 160 gaa cgt ctg cgt cgt aaa gaa taa Glu Arg Leu Arg Arg Lys Glu 165 2 167 <210> <211> <212> PRT <213> human synthesis <400> Met Cys Asp Leu Pro Gln Thr His Ser Leu Gly Asn Arg Arg Ala Leu 10 15Ile Leu Leu Ala Gln Met Arg Arg Ile Ser Pro Phe Ser Cys Leu Lys 20 25 30 Asp Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Asp Gly Asn Gln 35 40 45 Phe Gln Lys Ala Gln Ala Ile Ser Val Leu His Glu Met Ile Gln Gln 50 55 60 Thr Phe Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu 65 70 75 80 Ser Leu Leu Glu Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp 85 90 95 Leu Glu Ala Cys Val Ile Gln Glu Val Gly Val Glu Glu Thr Pro Leu 100 105 110 Met Asn Val Asp Ser Ile Leu Ala Val Lys Lys Tyr Phe Gln Arg Ile 115 120 125 Thr Leu Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val 130 135 140 Val Arg Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln

432

480

504

## sequence listing.ST25

## Glu Arg Leu Arg Arg Lys Glu 165

| <210> 3<br><211> 360<br><212> DNA<br><213> human synthesis |                                      |                          |                   |                  |                  |                  |                   |                   |                  |                  |                  |                  |                   |                  |                  |     |
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| <400<br>atg<br>Met<br>1                                    | tgt                                  | gat<br>Asp               | tta<br>Leu        | cct<br>Pro<br>5  | caa<br>Gln       | act<br>Thr       | cat<br>His        | tct<br>Ser        | ctt<br>Leu<br>10 | ggt<br>Gly       | aac<br>Asn       | cgt<br>Arg       | cgc<br>Arg        | gct<br>Ala<br>15 | ctg<br>Leu       | 48  |
| att<br>Ile   | ctg<br>Leu                           | ctg<br>Leu               | gca<br>Ala<br>20  | cag<br>Gln       | atg<br>Met       | cgt<br>Arg       | cgt<br>Arg        | att<br>Ile<br>25  | tcc<br>Ser       | ccg<br>Pro       | ttt<br>Phe       | agc<br>Ser       | tgc<br>Cys<br>30  | ctg<br>Leu       | aaa<br>Lys       | 96  |
| gac<br>Asp   | cgt<br>Arg                           | cac<br>His<br>35         | gac<br>Asp        | ttc<br>Phe       | ggc<br>Gly       | ttt<br>Phe       | ccg<br>Pro<br>40  | caa<br>Gln        | gaa<br>Glu       | gag<br>Glu       | ttc<br>Phe       | gat<br>Asp<br>45 | ggc<br>Gly        | aac<br>Asn       | caa<br>Gln       | 144 |
| ttc<br>Phe   | cag<br>Gln<br>50                     | aaa<br>Lys               | gct<br>Ala        | cag<br>Gln       | gca<br>Ala       | atc<br>Ile<br>55 | tct<br>Ser        | gta<br>Val        | ctg<br>Leu       | cac<br>His       | gaa<br>Glu<br>60 | atg<br>Met       | atc<br>Ile        | caa<br>Gln       | cag<br>Gln       | 192 |
| acc<br>Thr<br>65   | ttc<br>Phe                           | aac<br>Asn               | ctg<br>Leu        | ttt<br>Phe       | tcc<br>ser<br>70 | act<br>Thr       | aaa<br>Lys        | gac<br>Asp        | agc<br>Ser       | tct<br>Ser<br>75 | gct<br>Ala       | gct<br>Ala       | tgg<br>Trp        | gac<br>Asp       | gaa<br>Glu<br>80 | 240 |
| agc<br>Ser   | ttg<br>Leu                           | ctg<br>Leu               | gag<br>Glu        | aag<br>Lys<br>85 | ttc<br>Phe       | tac<br>Tyr       | act<br>Thr        | gaa<br>Glu        | ctg<br>Leu<br>90 | tat<br>Tyr       | cag<br>Gln       | cag<br>Gln       | ctg<br>Leu        | aac<br>Asn<br>95 | gac<br>Asp       | 288 |
| ctg<br>Leu   | gaa<br>Glu                           | gca<br>Ala               | tgc<br>Cys<br>100 | gta<br>Val       | atc<br>Ile       | cag<br>Gln       | gaa<br>Glu        | gtt<br>Val<br>105 | ggt<br>Gly       | gta<br>Val       | gaa<br>Glu       | gag<br>Glu       | act<br>Thr<br>110 | ccg<br>Pro       | ctg<br>Leu       | 336 |
| atg<br>Met   | aac<br>Asn                           | gtc<br>Val<br>115        | gac<br>Asp        | tct<br>Ser       | att<br>Ile       | ctg<br>Leu       | gca<br>Ala<br>120 |                   |                  |                  |                  |                  |                   |                  |                  | 360 |
| <210<br><211<br><212<br><213                               | L> 1<br>2> F                         | l<br>L20<br>PRT<br>numar | ı syr             | nthes            | sis              |                  |                   |                   |                  |                  |                  |                  |                   |                  |                  |     |
| <400   | )> 4                                 | ļ.                       |                   |                  |                  |                  |                   |                   |                  |                  |                  |                  |                   |                  |                  |     |
| Met<br>1   | Cys                                  | Asp                      | Leu               | Pro<br>5         | Gln              | Thr              | His               | Ser               | Leu<br>10        | Gly              | Asn              | Arg              | Arg               | Ala<br>15        | Leu              |     |

Page 3

Ile Leu Leu Ala Gln Met Arg Arg Ile Ser Pro Phe Ser Cys Leu Lys 20 25 30

| Asp   | Arg  | His<br>35                                    | Asp  | Phe                           | Gly        | Phe        | Pro<br>40  | sequ<br>Gln                    | ence<br>Glu      | lis<br>Glu        | ting<br>Phe | .ST2<br>Asp<br>45 | 5<br>Gly         | Asn                     | G]n        |          |
|---|--|--|--|-------------------------------|------------|------------|------------|--------------------------------|------------------|-------------------|-------------|-------------------|------------------|-------------------------|------------|----------|
| Phe   | G]n<br>50                                      | Lys  | Ala  | Gln                           | Ala        | Ile<br>55  | Ser        | val                            | Leu              | His               | Glu<br>60   | Met               | Ile              | Gln                     | Gln        |          |
| Thr<br>65   | Phe  | Asn  | Leu  | Phe                           | Ser<br>70  | Thr        | Lys        | Asp                            | Ser              | Ser<br>75         | Ala         | Ala               | Trp              | Asp                     | Glu<br>80  |          |
| Ser   | Leu  | Leu  | Glu  | Lys<br>85                     | Phe        | Tyr        | Thr        | Glu                            | Leu<br>90        | Tyr               | Gln         | Gln               | Leu              | Asn<br>95               | Asp        |          |
| Leu   | Glu  | Ala  | Cys<br>100                                   | Val                           | Ile        | Gln        | Glu        | Val<br>105                     | Gly              | val               | Glu         | Glu               | Thr<br>110       | Pro                     | Leu        |          |
| Met   | Asn  | val<br>115                                   | Asp  | Ser                           | Ile        | Leu        | Ala<br>120 |                                |                  |                   |             |                   |                  |                         |            |          |
| <210<br><211<br><212<br><213  | L> :<br>?> [                                   | 5<br>LO8<br>DNA<br>chemi                     | ical   | synt                          | hesi       | s          |            |                                |                  |                   |             |                   |                  |                         |            | ·        |
|   |  |  |  |                               |            |            |            |                                |                  |                   |             |                   |                  |                         |            |          |
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| <221<br><222<br><400<br>atg<br>Met<br>1<br>atc  | l> (<br>!> (<br>!> !<br>tgc<br>Cys             | (1)<br>gac<br>Asp<br>ctg                     | ctg<br>Leu<br>gct                            | ccg<br>Pro<br>5               | Gln<br>atg | Thr        | His        | tcc<br>Ser<br>atc<br>Ile<br>25 | Leu<br>10<br>tcc | Gly               | Asn ·       | Arg               | Arg              | Āla<br>15               | Leū        | 48<br>96 |
| <221<br><222<br><400<br>atg<br>Met<br>1<br>atc<br>Ile   | l> (2> (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) | (1)<br>gac<br>Asp<br>ctg                     | ctg<br>Leu<br>gct<br>Ala<br>20<br>gac        | ccg<br>Pro<br>5               | Gln<br>atg | Thr        | His        | ser<br>atc<br>Ile              | Leu<br>10<br>tcc | Gly               | Asn ·       | Arg               | tgc<br>Cys       | Āla<br>15               | Leū        |          |
| <221<br><222<br><400<br>atg<br>Met<br>1<br>atc<br>Ile<br>gac<br>Asp<br><210<br><211<br><212<br><213 | l> (2> (2) (2) (2) (2) (2) (2) (2) (2) (2) (2) | ctg<br>cac<br>His<br>35                      | ctg<br>Leu<br>gct<br>Ala<br>20<br>gac<br>Asp | ccg<br>Pro<br>5<br>cag<br>Gln | Gln<br>atg | Cgt<br>Arg | His        | ser<br>atc<br>Ile              | Leu<br>10<br>tcc | Gly               | Asn ·       | Arg               | tgc<br>Cys       | Āla<br>15               | Leū        | 96       |
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## sequence listing.ST25

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